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United States Patent [19]**Dardik**[11] **Patent Number:** **5,752,521**[45] **Date of Patent:** **May 19, 1998**[54] **THERAPEUTIC EXERCISE PROGRAM**[76] **Inventor:** **Irving I. Dardik, R.D. 1, Box 253,
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07838**[21] **Appl. No.:** **151,508**[22] **Filed:** **Nov. 12, 1993**[51] **Int. Cl.⁶** **A61B 5/02**[52] **U.S. Cl.** **128/687; 482/9**[58] **Field of Search** **128/687-690;
482/8-9**[56] **References Cited****U.S. PATENT DOCUMENTS**

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[57] **ABSTRACT**

A therapeutic exercise program for treating a patient whose abnormal condition, regardless of its nature and origin, is indicated by a resting heart pulse rate that deviates from the normal resting rate and a maximum heart pulse rate obtainable by physical exertion that deviates from the normal maximum rate, i.e., compromised range and flexibility. At the outset of the program, the patient is tested to determine his initial heart pulse range extending between his resting and maximum heart pulse rates to provide a base line for the program. In the course of the program, the patient whose heart beat is continuously monitored while exercising, undergoes a series of exercise-relaxation cycles. During each cycle, the exercising patient expends a surge of energy giving rise to a high pulse peak rate, the patient then relaxing to complete the cycle. This energy surge induces in the patient's heart a pendulum effect, causing the pulse rate to swing down from the peak rate to a resting rate below that in the initial range. The temporal conditions under which the program is conducted and its duration are such as to bring about a progressive rise in the maximum pulse rate attainable by the patient and to expand his range and increase the flexibility whereby at the conclusion of the program, the patient's maximum heart pulse rate and resting pulse rate approach those of an individual free of the abnormal condition.

7 Claims, 1 Drawing Sheet